



DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2021-0712; Project Identifier 2019-CE-018-AD; Amendment 39-21807; AD 2021-23-09]

RIN 2120-AA64

Airworthiness Directives; ASI Aviation (Type Certificate Previously held by Reims Aviation S.A.) Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: The FAA is superseding Airworthiness Directive (AD) 2015-16-07 R1, which applied to certain Reims Aviation S.A. (type certificate now held by ASI Aviation) Model F406 airplanes. AD 2015-16-07 R1 required inspecting the left-hand and right-hand rudder control pedal torque tubes and replacing with a serviceable part as necessary. Since the FAA issued AD 2015-16-07 R1, the European Aviation Safety Agency (EASA) superseded its mandatory continuing airworthiness information (MCAI) to correct an unsafe condition on these products. This AD retains the requirements of AD 2015-16-07 R1, expands the applicability, and requires repeating the inspections using updated procedures. The FAA is issuing this AD to address the unsafe condition on these products.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of a certain publication listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact ASI Aviation, Aérodrome de Reims Prunay, 51360 Prunay, France; telephone: +33 3 26 48 46 84; fax: +33 3 26 49 18 57; email: contact@asi-aviation.fr; website: <https://asi-aviation.fr/page-Accueil.html>. You may view this service information at the FAA, Airworthiness Products

Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148. It is also available at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0712.

Examining the AD Docket

You may examine the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0712; or in person at Docket Operations between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this final rule, the MCAI, any comments received, and other information. The address for Docket Operations is U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE, Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Gregory Johnson, Aviation Safety Engineer, International Validation Section, FAA, 901 Locust, Room 301, Kansas City, MO 64106-2641; phone: (720) 626-5462; email: gregory.johnson@faa.gov.

SUPPLEMENTARY INFORMATION:

Background

The FAA issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 to supersede AD 2015-16-07 R1, Amendment 39-18328 (80 FR 72563, November 20, 2015) (AD 2015-16-07 R1). AD 2015-16-07 R1 applied to certain Reims Aviation S.A. (type certificate now held by ASI Aviation) Model F406 airplanes and required inspecting the left-hand and right-hand rudder control pedal torque tubes and replacing with a serviceable part as necessary. The NPRM published in the *Federal Register* on August 27, 2021 (86 FR 48083).

The NPRM was prompted by AD 2019-0016, dated January 29, 2019 (referred to after this as “the MCAI”), issued by EASA, which is the Technical Agent for the Member States of the European Union. The MCAI states:

An occurrence was reported where one pilot rudder control pedal of an F 406 aeroplane detached in flight. No change in aeroplane attitude occurred. The rudder was controlled using the co-pilot rudder pedals, and an uneventful landing

was made. Investigation results determined that the affected rudder pedal torque tube had failed due to a crack.

This condition, if not detected and corrected, could lead to further cases of rudder pedal torque tube failure, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, ASI Aviation issued SB [service bulletin] F406-104 to provide inspection instructions. Consequently, EASA issued Emergency AD 2015-0159-E (later revised) to require a one-time inspection of the rudder control pedal torque tubes, both left-hand (LH) and right-hand (RH), and, depending on findings, replacement with a serviceable part. That [EASA] AD also required inspection of replacement rudder control pedal torque tubes before installation.

Since EASA AD 2015-0159R1 was issued, further occurrences were reported of finding cracks on rudder pedal torque tubes. Consequently, ASI Aviation issued the SB (as defined in this [EASA] AD) to provide instructions for repetitive visual, dye- or fluorescent-penetrant, and magnetic particle inspections.

For the reason described above, this [EASA] AD retains the requirements of EASA AD 2015-0159R1, which is superseded, and requires implementation of repetitive inspections of the affected parts and, depending on findings, replacement.

You may examine the MCAI in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0712.

Discussion of Final Airworthiness Directive

Comments

The FAA received no comments on the NPRM or on the determination of the costs.

Conclusion

This product has been approved by the aviation authority of another country and is approved for operation in the United States. Pursuant to the FAA's bilateral agreement with this State of Design Authority, it has notified the FAA of the unsafe condition described in the MCAI and service information referenced above. The FAA determined that air safety requires adopting this AD as proposed. Accordingly, the FAA is issuing this AD to address the unsafe condition on these products. This AD is adopted as proposed in the NPRM.

Related Service Information under 1 CFR Part 51

The FAA reviewed ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018. The service information specifies procedures for repetitively

inspecting the left-hand and right-hand rudder control pedal torque tubes for cracks and replacing with a serviceable part. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in ADDRESSES.

Differences Between this AD and the MCAI

The MCAI specifies an initial compliance time of during the next 600 flight hour (FH) maintenance check for a visual and a dye or fluorescent penetrant inspection. This AD requires those initial inspections before further flight.

The MCAI specifies an initial compliance time of during the next 2,400 FH maintenance check for a magnetic particle inspection. This AD requires that initial inspection within 100 hours time-in-service after the effective date of this AD.

If a crack is detected during any inspection, the MCAI specifies contacting ASI Aviation for further information. This AD requires replacing the rudder control pedal torque tube with a serviceable part.

Costs of Compliance

The FAA estimates that this AD affects 4 airplanes of U.S. registry.

The FAA estimates the following costs to comply with this AD:

Estimated costs

Action	Labor Cost	Parts Cost	Cost per airplane	Cost on U.S. operators
Inspections	5 work-hours x \$85 per hour = \$425 per inspection cycle	\$0	\$425 per inspection cycle	\$1,700 per inspection cycle

The FAA estimates the following costs to replace a rudder control pedal torque tube if required by the results of the inspections. The FAA has no way of determining the number of airplanes that might need these replacements:

On-condition costs

Action	Labor Cost	Parts Cost	Cost per airplane
Replacement	20 work-hours x \$85 per hour =	\$9,100	\$10,800

	\$1,700		
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Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA’s authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency’s authority.

The FAA is issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: General requirements. Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

This AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. For the reasons discussed above, I certify that this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Will not affect intrastate aviation in Alaska, and
- (3) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by

a. Removing Airworthiness Directive 2015-16-07 R1, Amendment 39-18328 (80 FR 72563, November 20, 2015); and

b. Adding the following new airworthiness directive:

2021-23-09 ASI Aviation (Type Certificate Previously Held by Reims Aviation S.A.):

Amendment 39-21807; Docket No. FAA-2021-0712; Project Identifier 2019-CE-018-AD.

(a) Effective Date

This airworthiness directive (AD) is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

This AD replaces AD 2015-16-07 R1, Amendment 39-18328 (80 FR 72563, November 20, 2015) (AD 2015-16-07 R1).

(c) Applicability

This AD applies to ASI Aviation (type certificate previously held by Reims Aviation S.A.) Model F406 airplanes, all serial numbers, certificated in any category.

(d) Subject

Joint Aircraft System Component (JASC) Code 2700, Flight Control System.

(e) Unsafe Condition

This AD was prompted by reports of detachment of the pilot's rudder control pedal in flight. The FAA is issuing this AD to detect and correct cracking of the pilot's rudder control pedal. The unsafe condition, if not addressed, could result in detachment of the pedal with possible loss of airplane directional control.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Definition

For the purpose of this AD, a serviceable part is:

(1) A rudder control pedal torque tube (left-hand (LH) part number (P/N) 5115260-1 or right-hand (RH) P/N 5115260-2) that has had a magnetic particle inspection by following the instructions of Part B of ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018, and no cracks were found; or

(2) A new rudder control pedal torque tube (LH P/N 5115260-1 or RH P/N 5115260-2) that has never been installed on an airplane.

(h) Repetitive Inspections and Corrective Actions

(1) Before further flight after the effective date of this AD, and thereafter at intervals not to exceed 600 hours time-in-service (TIS), do a visual inspection and a dye or fluorescent penetrant inspection for cracks of the LH and RH rudder control pedal torque tubes by following the Accomplishment Instructions, Part A or Part AA, in ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018.

(2) Within 100 hours TIS after the effective date of this AD, and thereafter at intervals not to exceed 2,400 hours TIS, do a magnetic particle inspection for cracks of the LH and RH rudder control pedal torque tubes by following the Accomplishment Instructions, Part B, in ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018.

(3) If, during any inspection required by paragraph (h)(1) or (2) of this AD, any crack is detected on a rudder control pedal torque tube, you are not required to contact ASI Aviation as specified in steps A.16, AA.5, and B.4 of ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018. Instead, before further flight, replace the rudder control pedal torque tube with a serviceable part as defined by this AD.

(i) Installation Limitation

As of the effective date of this AD, do not install a rudder control pedal torque tube P/N 5115260-1 (LH) or P/N 5115260-2 (RH) on any airplane unless it is a serviceable part as defined by this AD.

(j) Alternative Methods of Compliance (AMOCs)

(1) The Manager, International Validation Branch, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local

Flight Standards District Office, as appropriate. If sending information directly to the manager of the certification office, send it to the attention of the person identified in paragraph (k)(1) of this AD or email: 9-AVS-AIR-730-AMOC@faa.gov.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(k) Related Information

(1) For more information about this AD, contact Gregory Johnson, Aviation Safety Engineer, International Validation Section, FAA, 901 Locust, Room 301, Kansas City, MO 64106-2641; phone: (720) 626-5462; email: gregory.johnson@faa.gov.

(2) Refer to European Aviation Safety Agency (EASA) AD 2019-0016, dated January 29, 2019, for more information. You may examine the EASA AD in the AD docket at <https://www.regulations.gov> by searching for and locating Docket No. FAA-2021-0712.

(l) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) ASI Aviation Service Bulletin No. F406-104, Revision 1, dated December 14, 2018.

(ii) [Reserved]

(3) For service information identified in this AD, contact ASI Aviation, A  rodrome de Reims Prunay, 51360 Prunay, France; telephone: +33 3 26 48 46 84; fax: +33 3 26 49 18 57; email: contact@asi-aviation.fr; website: <https://asi-aviation.fr/page-Accueil.html>.

(4) You may view this service information at FAA, Airworthiness Products Section, Operational Safety Branch, 901 Locust, Kansas City, MO 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, email: fr.inspection@nara.gov, or go to: <https://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued on October 27, 2021.

Lance T. Gant, Director,
Compliance & Airworthiness Division,
Aircraft Certification Service.

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